Investigation of Relation between Learning Styles, Self-Actualisation

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Abstract

Self-actualization is a growth need and is reached when all other needs are fulfilled. It is a life-long process and a holistic development among adolescents, which prepares them to become self-confident and self –aware so that they can contribute for their own self-fulfillment to reach higher in life. Each individual has a lot of hidden potentialities, talents or competencies he or she could develop, but which has yet not come to the surface. Self-actualization signifies that these potentialities of the self are made actual, are actualized in a continuous process of learning. Learning environment involves processes associated with student's self-actualization. Learning style research suggests that students make sense of the world in different ways. Each learner has a clear and coherent set of learning likes and dislikes. We need to study the unique learning characteristics of adolescents and how these influences self-actualization. The present study consisted of thousand students drawn randomly from higher secondary schools in Chennai, Thiruvallur and kancheepuram districts. The tools used to collect data for the study were (i) learning style Questionnaire, (ii) Self actualization Questionnaire and (iii) Personal Data Sheet. Regression analysis showed that there is a positive relationship between learning style and self actualization among adolescents.

KEYWORDS: Environmental, Emotional, Sociological, Psychological, Physical and Technological Learning Styles, Self-actualization.

Introduction

Maslow (1954) stated that Self-actualization refers to man's desire for self-fulfillment, namely, the tendency for him to become actualized in what he is potentially. Maslow viewed the fully self-actualized person as one who has realized hidden potentialities, talents and abilities along with an achieved state of self-fulfillment. ''Such people seem to be fulfilling themselves and to be doing the best that they are capable of doing. They are people who have developed or are developing to the full stature of which they are capable of '' (Maslow,1970.p.150). A musician must make music, an artist must paint, a poet must write, if he is to be ultimately at peace with himself. What a man can be, he must be. He must be true to his own nature which according to Maslow is self-actualization. Maslow believed that the climax of self-actualization is the "peak experience," He felt that a peak experience is what you feel and perhaps "know" when you gain authentic elevation as a human being. It is a generalization for the best moments of the human being, for the happiest moments of life, for experiences of ecstasy, rapture, bliss, of the greatest joy. Maslow (1962) defines self-actualizing by describing peak experiences. Students while learning the new concepts if they are able to understand the concepts and are able to apply the knowledge, like solving complex problems in

mathematics that is the happiest moments of their life. Learning is a process that takes place in mind and it is a dynamic process during which individuals make internal adjustments individually and develop necessary skills. Every learner can become self actualized.

Learning style refers to a person's natural, habitual and preferred ways of learning. Every person has "a consistent way of responding to and using stimuli in the context of learning"(Claxton&Raston.1978:1).Style is said to be "the most important concept to demand attention in education in many years and is at the core of what it means to be a person"(Guild& Garger,1985). Keefe defines it as a "characteristics cognitive, affective and psychological behaviours that serve relatively stable indicators of how learners perceive, interact with respond to the learning environment"(keefe,1987). Learning style research suggests that students make sense of the world in different ways. Different ways of learning will enable them to realize their inner potential in turn they will become self actualized.

Review of the related literature

Student's learning style plays a vital role in his academic success. **Agrawal and Chawla (2005)** revealed that the Co-operative Learning Strategy Based Material was significantly effective in improving the level of academic achievement. **Nasir, (2006)** examined the learning styles of multi-ethnic students in four universities of Malaysia. The students were compared on gender, program of studies and academic achievement levels, using a modified Honey and Mumford Learning Style Questionnaire. The results showed that both male and female students' most preferred learning style was reflector style, while the activist style was the least preferred.

Similar pattern of learning styles was exhibited by the Arts and Science students. It was also concluded that there was no significant difference between male and female, science and arts students so far as their learning styles were concerned. There was no significant relationship between learning style and academic achievements. **Erton (2010)** explored the relations between personality traits, language learning styles and success in foreign language achievement. The findings revealed that there was no significant relationship between the personality traits (introversion, extroversion) of the learners in their foreign language achievement. It was also concluded that students with visual leaning style were the most successful as compared to the students with other learning styles. **Abidin, et al. (2011)** studied learning styles and overall academic achievement in a specific educational system. It was concluded that the high, moderate and low achievers have a similar preference pattern of learning. Moreover, the learning styles framework does not change with subjects. **Liang (2012)** studied the effects of learning styles and perceptions on application of interactive learning guides for web based courses. The results revealed no significant statistical differences in learning styles and learning performance between the two groups. However significant main effects for both gender and learning style, and gender and the perception of utility were reported. Reviews showed that very less research was undertaken to find the relation between learning styles and self –actualization. Hence the present study evolved a research questions as follows.

Research Questions

The study attempts to seek answers to the following specific research question:

- Do components of Learning Styles of XI standards students have any impact on their Self-Actualization?

Objectives of the Study

➢ To find out whether there is any relationship between components of Learning Styles and Self-actualization of higher secondary students.

Hypothesis

➢ There is a significant linear relationship between Components of Learning styles and self-actualization of higher secondary students.

Sample

Sample consisting of thousand pupils distributed over the age group 15 to 17 years from XI standard was chosen using stratified sampling method. The sample consisted of thousand pupils drawn from ten different schools in Chennai, Thiruvallur and Kancheepuram districts.

Tools used

Learning Styles Scale

The investigators prepared the Learning Styles Questionnaire in line with the model of the questionnaire prepared by Rita Dunn and Kenneth Dunn and it is consisting of six dimensions consisting of environmental, emotional, sociological, physiological, psychological and technological learning styles of 38 items with three alternatives namely: Almost Always, Generally and Never.

Environmental

The environmental strand refers to these elements: lighting, sound, temperature, and seating arrangement. For example, some people need to study in a cool and quiet room, and others cannot focus unless they have music playing and it is warm (sound and temperature elements).

Emotional

This strand includes the following elements: motivation, persistence, responsibility, and structure. For example, some people must complete a project before they start a new one, and others work best on multiple tasks at the same time (persistence element).

Sociological

The sociological strand represents elements related to how individuals learn in association with other people: (a) alone or with peers, (b) an authoritative adult or with a collegial colleague, and (c) learning in a variety of ways or in routine patterns. For example, a number of people need to work alone when tackling a new and difficult subject, while others learn best when working with colleagues (learning alone or with peers' element).

Physiological

The elements in this strand are: perceptual (auditory, visual, tactile, and kinesthetic), time-of-day energy levels, intake (eating or not while studying) and mobility (sitting still or moving around). For example, many people refer to themselves as night owls or early birds because they function best at night or in the morning (time-of-day element).

Psychological

The elements in this strand correspond to the following types of psychological processing: hemispheric, impulsive or reflective, and global versus analytic. The

hemispheric element refers to left and right brain processing modes; the impulsive versus reflective style describes how some people leap before thinking and others scrutinize the situation before moving an inch. Global and analytic elements are unique in comparison to other elements because these two elements are made up of distinct clusters of elements found in the other four strands. The elements that determine global and analytic processing styles are: sound, light, seating arrangement, persistence, sociological preference, and intake.

Technological

The current stage is technological era hence the investigator thought it is appropriate to include one more dimension to the tool namely technological. One more sub-scale called 'Technological' has also been included to make 6 sub-scales.

The score of the scale is 114. The reliability of the scale was found to be 0.759.

Self-actualization Scale

Sharma's self-actualization scale (2009) which has been standardized was used to measure the score on self actualization. It consists of 75 statements with three alternatives never, sometimes, always. The reliability was found to be 0.82.

Analysis of the Data

The data were analyzed using the regression analysis. The results of the study are presented in the following table.

A linear combination of the components of Learning Styles significantly related to Self-actualization

In order to assess the linear relationship of the components of Learning Styles on Self-actualization; regression analysis was carried out using self- actualization as the dependent variable and components of learning styles as independent variables. The result of the regression analysis is presented in Table a, Table b, Table c.

The Regression 'R' value is 0.756 for Self-actualization on all the components in Learning Styles in the regression line is significant tested by the F test (F=220.187) at 0.0005 level. The components of Learning Styles together explains 57% (R^2=0.571) of the variance. The tables of co-efficient also indicate that the co-efficient of the components of the Learning Styles are significant at 0.0005 levels thus pointing out a positive relationship with Self-actualization. Of the six components, Physiological (Beta 0.305) seems to play a vital role followed by Technological (Beta 0.201), Psychological (Beta 0.173), Sociological (Beta 0.167), Environmental (Beta 0.158), and Emotional (Beta 0.148).

The following regression equation has been formed to predict tested Self-actualization in terms of components of Learning Styles.

$$y = 97.436 + 0.688\, x_1 + 0.720\, x_2 + 0.800\, x_3 + 1.379\, x_4 + 0.881\, x_5 + 0.942\, x_6$$

Where y = Self-actualization

x_1 = Environmental

x_2 = Emotional

x_3 = Sociological

x_4 = Physiological

x_5 = Psychological

x_6 = Technological

Major findings and Discussions
- There is a positive relationship between the components of Learning Styles and Self-actualization.
- Learning Styles contribute 57% of variance in predicting self-actualization.

The present study revealed that there is no significant difference between boys and girls in learning styles which agrees with result of **Pio Albina (2013)** who found that there is no significant difference between learning styles and academic achievement. But contradictory results were seen by **Muhammad Shahid Farooq** and **Jean-claude Regnier (2001)** who found that there is significant difference between gender and learning styles. Female students have more association with accommodating learning styles and male students with the diverging and assimilating style. **Praveen Sharma and Neetu (2011)** found that there is significant difference in the learning styles of male and female secondary school students. The present study showed that there is no significant difference between the higher secondary boys and girls in their self- actualization. This is supported by **Dr.P.Ganesan (2012), Roothman and colleagues (2003)** who reported no difference between gender and self actualization. **On the contrary Trupti Ambalal Chandaliya (2015), Bhagyashri K. Aashra and Dr. Yogesh A Jogsan (2013)** found that there was significant difference between gender of college students and self-actualization.

Conclusion

The findings of the present study showed that the learning styles of higher secondary students are positively related with self- actualization. Clearly much more research needs to be conducted, both into learning styles preferences and the relationship between learning styles and self-actualization. Students must be helped to identify their preferred styles and to recognize their effects on learning. Teachers must provide a learning environment that responds to different learning style preferences of the students. This research paper indicates that teachers can benefit from a clear understanding of students learning style preferences by bringing awareness of student's inner potential. It is clear however that by helping students to understand their learning styles and to exercise control over their self-actualization (hidden potentialities), we can assist them to become more effective learners. Programs should be designed to improve students' learning style and learning strategies for all levels to make teaching –learning more effective. The students should be properly guided and given motivation to select individual learning styles that are appropriate and applicable in their environment for them to achieve self-actualization.

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Table-a
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.76	0.57	0.57	5.46

a. Predictors: (Constant), Technical, Psychological, Environmental, Emotional, Physical, Sociological

b. Dependent Variable: Self-actualization

Table-b
Table of ANOVA^b testing the significance of the Regression between Self-actualization and the Components of Learning Styles

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	39414.30	6	6569.05	220.19	0.000^a
	Residual	29625.14	993	29.83		
	Total	69039.44	999			

a. Predictors: (Constant), Technical, Psychological, Environmental, Emotional, Physical, Sociological

b. Dependent Variable: Self-actualization

Table-c
Table Showing the Significance of Co-efficient in the Regression Equation
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	97.44	2.54		38.32	0.000
	Environmental	0.69	0.11	0.16	6.12	0.000
	Emotional	0.72	0.13	0.15	5.77	0.000
	Sociological	0.80	0.13	0.17	6.41	0.000
	Physical	1.38	0.12	0.31	11.87	0.000
	Psychological	0.88	0.13	0.17	6.76	0.000
	Technological	0.94	0.12	0.20	7.54	0.000

a. Dependent Variable: Self-actualization